

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR 115415 - Diesel Engine

Sample No: LH0285062

Oil Type: APRIL SUPERFLO SUPERPRO RXL SYN 5W40



#### SAMPLE INFORMATION

Sample Number	LH0285062	LH0247305	LH0239340	LH0178553
Sample Date	05 Feb 2024	06 Mar 2023	20 Sep 2022	10 Sep 2021
Machine Hours	3117	2056	1696	495
Oil Hours	0	0	0	0
Oil Changed	Changed	N/A	Changed	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL

EARTHLINE FOUNDATIONS AND SHORING LTD  
160 ADMIRAL BLVD  
MISSISSAUGA, ON  
CA L5T 2N6  
Contact: Service Manager



#### OIL CONDITION

Visc @ 100°C	cSt	11.5	11.6	11.6	11.5
Oxidation (PA)	%	99	77	88	180

T:  
F:



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	0	0
Nitration (PA)	%	93	77	84	89
Sulfation (PA)	%	67	61	63	103
Glycol	%	0.0	NEG	NEG	0.0
Fuel	%	2.1	<1.0	<1.0	1.4
Silicon	ppm	6	6	6	9
Sodium	ppm	5	4	4	3
Potassium	ppm	21	1	2	14

#### Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is acceptable for the time in service.



#### WEAR METALS

Iron	ppm	10	5	6	12
Copper	ppm	4	2	8	74
Lead	ppm	2	0	<1	4
Tin	ppm	<1	<1	<1	1
Aluminum	ppm	5	1	1	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	62	58	57	41
Nickel	ppm	<1	<1	0	<1
Titanium	ppm	0	<1	<1	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	0	<1	<1	1
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	836	875	838	1389
Magnesium	ppm	1115	1110	1134	829
Zinc	ppm	1160	1180	1195	829
Phosphorus	ppm	956	1090	1113	741
Barium	ppm	1	<1	1	25
Boron	ppm	15	37	27	69

Depot: EARMIS  
Unique No: 5723119  
Signed: Wes Davis  
Report Date: 08 Feb 2024



### GRAPHS

